

AMENDMENTS TO THE SPECIFICATION

Please replace the present title with the following rewritten title:

Page 10, paragraph 3.

In an apparatus shown in the figure, an ion source 11 is located in a vacuum chamber 1 of a general DC magnetron sputtering apparatus. In the chamber 1, disposed are a magnetron cathode 3 with a chromium target 5 having a size of $\phi 6$ inches and thickness of 5 mm disposed thereon, a synthetic quartz substrate 6 having a size of six inches square and thickness of 0.25 inches, and the ion source 11 of an end hall type. As illustrated in the figure, a backing plate 4 is interposed between the magnetron cathode 3 and the chromium target 5 while the substrate 6 is placed on the anode 2. The ion source 11 is disposed at an appropriate angle so that the substrate 6 is irradiated with an ion. In this case, a distance of a straight line connecting a target center to a substrate surface center is 23 cm, and a distance of a straight line connecting the ion source to the substrate surface center is 16 cm. Moreover, the inside of the chamber was evacuated through an outlet port 8 to a degree of vacuum of 1×10^{-4} Pa by an exhaust pump.